The Claims:

Following is a complete listing of the claims pending in this application including any amendments:

1-18. (Canceled)

19. (Withdrawn) A method of detecting hepatitis E virus infection in an individual, comprising:

a) reacting a serum sample taken from the individual with the Hepatitis E Virus (HEV) polypeptide composition of claim 1; and

b) examining a polypeptide of the composition for the presence of bound antibody.

20. (Withdrawn) The method of claim 18, wherein polypeptides of the HEV polypeptide composition are attached to a solid support, said reacting includes contacting such serum with the support and said examining includes reacting the support and bound antibody with a reporter-labeled anti-human antibody.

21. (Withdrawn) A kit for ascertaining the presence of antibodies to HEV in a serum sample taken from an individual, comprising:

a solid support with surface-bound antigens wherein the surface-bound antigens are polypeptides of the HEV polypeptide composition of claim 1.

22. (Withdrawn) A vaccine composition used in immunizing an individual against Hepatitis E Virus (HEV) comprising,

an HEV polypeptide composition of claim 1 in a pharmacologically acceptable carrier.

23. (Withdrawn) A vaccine composition of claim 22, where at least one polypeptide of the composition has an amino acid sequence selected from the group

consisting of SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, and homologous sequences therewith.

24. (Withdrawn) A method of inhibiting infection of an individual by HEV, comprising:

administering to the subject a vaccine composition of claim 22 in a therapeutically effective amount.

25. (Currently amended) A substantially isolated nucleic acid sequence encoding a polypeptide derived from the carboxy-terminal 549 amino acids of HEV open reading frame 2,

wherein the amino acid sequence of said polypeptide is selected from the group consisting of: SEQ ID NO: 15, SEQ ID NO: 16, sequences having the amino acid terminus of SEQ ID NO: 15 or SEQ ID NO: 16 and a deletion of up to 24 amino acids from the carboxy terminus, and sequences at least 70% homologous thereto, ~~The nucleic acid sequence of claim 11,~~ wherein said amino acid sequence ~~of~~ encoded by said ~~encoded~~ polynucleotide having the amino acid terminus of SEQ ID NO: 15 or SEQ ID NO: 16 and a deletion of up to 24 amino acids from the carboxy terminus is selected from the group consisting of SEQ ID NO~~S~~s: 25, 26, 27 and 28.

26. (New) An isolated nucleic acid sequence comprising a nucleic acid capable of hybridization to a HEV genome DNA encoding a polypeptide selected from the group consisting of SEQ ID NO:13 and SEQ ID NO:14, wherein said hybridization is carried out under hybridization conditions comprising three washes in 2xSSC, 0.1% SDS, 30 minutes each, and two washes in 2xSSC, 0.1% SDS, 10 minutes each.

27. (New) An expression vector for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 26, said nucleic acid sequence inserted into an expression vector, where said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell.

28. (New) An expression system for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 26, said nucleic acid sequence inserted into an expression vector, wherein said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell, and said expression vector is carried within the host cell.

29. (New) A method of producing a HEV polypeptide composition, comprising the steps of:

culturing a cell containing the expression vector of claim 27 under conditions sufficient to express a polypeptide sequence encoded by said nucleic acid.

30. (New) An isolated nucleic acid sequence comprising a nucleic acid capable of hybridization to a HEV genome DNA encoding a polypeptide selected from the group consisting of SEQ ID NO:17 and SEQ ID NO:18, wherein said hybridization is carried out under hybridization conditions comprising three washes in 2xSSC, 0.1% SDS, 30 minutes each, and two washes in 2xSSC, 0.1% SDS, 10 minutes each.

31. (New) An expression vector for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 30, said nucleic acid sequence inserted into an expression vector, where said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell.

32. (New) An expression system for producing a HEV polypeptide antigen composition, comprising

a nucleic acid sequence as recited in claim 30, said nucleic acid sequence inserted into an expression vector, wherein said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell, and said expression vector is carried within the host cell.

33. (New) A method of producing a HEV polypeptide composition, comprising the steps of:

culturing a cell containing the expression vector of claim 31 under conditions sufficient to express a polypeptide sequence encoded by said nucleic acid.